$\underline{\text{Table 1}}$ - Monomers Used in Example 2

Monofunctional Monomer:

2-EHA 2-Ethylhexyl acrylate

IOA Isooctyl acrylate

2-MTA 2-Methoxyethyl acrylate

EA Ethyl acrylate

MA Methyl acrylate

CHA Cyclohexyl acrylate

tBA t-Butyl acrylate

IBA Isobornyl acrylate

AA Acrylic acid

DPA Dicyclopentanyl acrylate

NVP N-Vinylpyrrolidone

Polyfunctional Monomer:

HDDA 1,6-Hexanediol diacrylate

NGTD Neopenthylglycolated trimethylolpropane

diacrylate

EBAD Ethoxylated bisphenol A diacrylate

PNGD Propoxylated neopentyl glycol diacrylate

ETPTA Ethoxylated trimethylolpropane triacrylate

TMPTA Trimethylolpropane triacrylate

<u>Table 2</u> - Resin Formulations Using Urethane Acrylate UX 4101 and the Mechanical Properties of Films Cured with Electron Beams

															
lon beams	Shape recovery temperature (°C)	1	i	ı	i	1	ſ	1	09	95	50	80	ı	1	1
with Electron	Permanent deforma- tion	×	×	×	×	×	×	×	٥	0	٥	0	×	×	×
Carea	180° Bend test	0	0	0	0	0	0	0	0	0	0	0	×	×	×
OI FILIIIS	Young's modulus	30	30	30	30	40	0.2	300	5700	12400	4600	12000	9100	1500	5100
ı rropertles	Elongation (%)	70	06	100	160	250	240	230	160	150	160	110	30	30	40
меспапісат	Tensile strength (kg/cm ²)	20	20	30	40	200	300	380	410	089	400	260	320	180	240
ella	Tg of poly X (°C)	-65	-50	-50	-23	3	15	41	94	106	120	175	75		
i	UX 4101/X	60/40	60/40	60/40	60/40	60/40	60/40	60/40	60/40	60/40	60/40	60/40	70/30	70/30	60/40
	X	IOA	2-ЕНА	2-MTA	EA	MA	СНА	tBA	IBA	AA	DPA	NVP	NGTD	нрра	EBAD

<u>Table 3</u> - Resin Formulations Using Urethane Acrylate UV 7700B and the Mechanical Properties of Films Cured with Electron Beams

scovery	ature												
S	temperature (°C)		*	1 1						44 4	4 4	4 4	4 4 4
Permanent	deforma- tion		×	× ×	× × ×	× × × ×	× × × × ×	x x x x x 4	x x x x x 0	x x x x x x d 0 x	x x x x x 4 0 x x	x x x x x x x x x x x	x x x x x d o x x x
700	Bend	×		×	x o	x 0 0	x 0 0 0	x 0 0 0 0	x 0 0 0 0 0	x o o o o o	x 0 0 0 0 0 x	x o o o o o x x	x o o o o o x x x
Vouner's	modulus	20		20	20	20 20 110	20 20 110 3800	20 20 110 3800 8500	20 20 110 3800 8500 12400	20 20 110 3800 8500 12400 300	20 20 110 3800 8500 12400 300	20 20 110 3800 8500 12400 300 970 2800	20 20 110 3800 8500 12400 12400 300 320
Flongation	(%)	40		40	40	40 80 130	40 80 130	40 80 130 110 60	40 80 130 110 60	40 80 130 110 60 50	40 80 130 110 60 50 60	40 80 130 110 60 50 60 40	40 80 130 110 60 60 60 40 20
Tensile	strength (kg/cm ²)	20		30	30	30 60	30 60 130 320	30 60 130 320 300	30 60 130 320 300 310	30 60 130 320 300 310 190	30 130 320 300 310 190	30 60 130 320 300 310 190 170	30 60 130 320 310 190 170 200 180
	poly X (°C)	-50	-50	,	-23	-23	-23	-23 3 41 94	-23 3 41 94 120	-23 3 41 94 120	-23 3 41 94 120	-23 3 41 94 120	-23 3 41 94 120
	UV 7700B/X	60/40	60/40		60/40	60/40	60/40 60/40 60/40	60/40 60/40 60/40	60/40 60/40 60/40 60/40	60/40 60/40 60/40 60/40 60/40	60/40 60/40 60/40 60/40 95/5	60/40 60/40 60/40 60/40 95/5 95/5	60/40 60/40 60/40 60/40 95/5 96/10 75/25
	×	2-EHA	2-MTA	_	EA	EA	EA MA tBA	EA MA tBA IBA	EA MA tBA IBA DPA	EA MA tBA IBA DPA HDDA	EA MA tBA IBA DPA HDDA HDDA	EA MA tBA IBA DPA HDDA HDDA HDDA	EA MA tBA IBA DPA HDDA HDDA HDDA HDDA